

REMARKS

Claims 1-32 are currently pending in this application, as amended. By the foregoing amendment, Applicants have amended the specification and claims 1, 2, 3, 5, 12, 15, 17, 18, and 20, and added new claims 21 through 32. No new matter has been introduced into the application by these amendments.

In the Action, the drawings were objected to for failing to comply with 37 CFR 1.84(p)(5) for including reference signs not mentioned in the description. The specification has been amended to include the missing reference signs without adding any new matter. Accordingly, Applicants respectfully request withdraw of the objection to the drawings.

The specification incorrectly noted the location of a downstream-facing coupler (240) shown correctly in the drawings. Paragraph 00037 has been amended to describe the location of the coupler (240) consistent with original Figure 6. No new matter has been added, and the amendment is supported by the originally filed drawings. It is respectfully submitted that this would have been recognized by a person of ordinary skill in the art so the correction should be entered.

In the Action, the oath or declaration was stated as defective, alleging that the inventors did not sign the declaration. Applicants respectfully submit that the executed declaration filed February 5, 2002 is not defective. A copy of the filed declaration and the post card submitted therewith is enclosed.

In the Action, claims 1-20 were rejected under 35 U.S.C. §102(b) as being anticipated by Williams (U.S. Patent No. 5,745,836). Applicants respectfully traverse this rejection.

Independent claims 1 and 12 are directed to a system for monitoring ingress noise in an HFC network; independent claims 5, 15, and 18 are directed to an HFC network which monitors ingress noise. Each of the claims 1, 5, 12, 15 and 18 recites a modem and an ingress noise monitoring interface to detect ingress noise. Claims 1 and 5 recite a modem in communication with a domain manager to transmit detected ingress noise information. Claims 12, 15, and 18 recite a modem connected to an upstream-facing directional coupler.

Williams discloses a system for reducing ingress in a plant which is very different from the Applicants' claimed invention. Williams discloses a return gate device (140) having a prybar receiver (230), which receives a prybar signal from any one of remote points (104, 290-292) and signals a return gate (225) to disconnect a return path based on whether the prybar signal is received. For example, when a prybar signal is received by the receiver (230) from a remote point (104, 290-292) the return gate (225) is signaled to close. However, when no prybar signal is received, i.e. the remote points are not transmitting, the gate remains open thereby not allowing ingress of noise or other undesirable transmissions. See column 10, lines 9-15.

Williams also discloses a data receiver (220) which receives signals traveling *downstream* from a headend (102) and transmits signals to a microprocessor (240). This data receiver (220) does not receive signals traveling *upstream* from the remote points (104, 290-292). Neither the data receiver (220) nor the processor (240) monitors ingress noise as suggested by the examiner. (It is unclear whether the examiner relies on element 220 or 240 to show ingress noise monitoring, but neither of those elements teach this claimed feature.)

Williams discloses an active system which requires transmission of a signal from a remote point (104, 290-292) or from the headend (102) to close a return gate (225). This configuration incidentally suppresses ingress noise, but Williams fails to disclose an ingress noise monitoring interface, as claimed by Applicants in claims 1, 5, 12, 15, and 18.

Williams does not address the problem of ingress noise as set forth in paragraphs 0009-0010 of the present application. Williams discloses no element or combination of elements that function to *monitor* ingress noise. Furthermore, Williams fails to disclose a modem to transmit ingress noise information, as recited in claims 1 and 5.

The ingress noise monitoring interface and modem recited by Applicants in claims 1, 5, 12, 15, and 18 allow for passive monitoring of ingress noise. No ingress noise monitoring is suggested or disclosed by the Williams reference. Accordingly,

Applicants respectfully submit that independent claims 1, 5, 12, 15, and 18 are patentable over Williams. The remaining pending claims depend from one of claims 1, 5, 12, 15, and 18, and are therefore also patentable over the cited reference.

Claims 4, 8, 16, and 19 are further patentable over Williams because Williams fails to disclose a downstream-facing coupler located upstream from an upstream facing coupler, or an upstream-facing coupler located downstream from a downstream-facing coupler. The couplers (237, 228) disclosed by Williams are not so arranged. Downstream-facing coupler (237) is located *downstream* from upstream-facing coupler (228). It follows that upstream-facing coupler (228) is located *upstream* from the downstream-facing coupler (237). Therefore, Applicants respectfully submit that claims 4, 8, 16, and 19 are patentable over Williams. Claims 21-23 and 27 which depend from one of claims 4 and 8 are therefore also patentable over the cited reference.

With regard to claim 9 there is no disclosure in the cited reference concerning a BTP located within a building which receives power from the building. Williams therefore cannot anticipate this claim.

With regard to claims 22 and 25, Williams fails to disclose a first and second diplexer which respectively separate and recombine an AC and RF line, wherein the upstream and downstream-facing couplers are arranged on the RF line. The diplex filters (202,205) disclosed by Williams separate a return path 120 from a forward

path 121, but do not separate an RF line from an AC line. Although Williams discloses an optional power passing circuit (Column 7, lines 66-67), there is no disclosure of the configurations claimed in either claim 22 or 25. Claims 23, 24, and 26 depend from one of claims 22 and 25 and are therefore also further patentable over the cited reference.

New claims 21, 23, 26, and 27 are further patentable over Williams because Williams fails to disclose at least two drop lines connected to an upstream-facing directional coupler by at least one splitter. Moreover, the cited reference fails to disclose a configuration including an AC and RF line, split and recombined by a pair of diplexers, having drop lines extending from an upstream-facing coupler located on the RF line, as claimed in claims 23 and 26. Claims 21, 23, and 27 are further distinguished from the cited reference in that they recite at least one of the drop lines connected to the modem.

Claim 30 is further patentable over Williams because Williams does not disclose a plurality of branches split into upstream and downstream lines by a diplexer, wherein an amplifier is located on the downstream line of each branch.

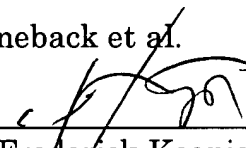
In view of the foregoing, Applicants respectfully assert that all claims are patentable over the prior art. Reconsideration and allowance of the claims is respectfully requested.

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**Application No.:** 10/017,062

If for any reason the Examiner believes that an interview, either telephonically or in person, would advance prosecution of the application, the Examiner is respectfully requested to contact the undersigned to arrange an interview.

Respectfully submitted,

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